

# Notice of Allowability

Application No.

10/806,450

Examiner

Sanza L. McClendon

Applicant(s)

ADEGAWA, YUTAKA

Art Unit

1711

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/20/07.
2. ☒ The allowed claim(s) is/are 1,2,4-8 and 11-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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**DETAILED ACTION**  
***Response to Amendment***

1. In response to the Amendment received on April 20, 2007, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claims 9-10. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Response to Arguments***

2. Applicant's arguments, see Remarks/Amendment, filed April 20, 2007, with respect to claims 1-2, 4-8 and 12-15 have been fully considered and are persuasive. The rejection of claims 1-2, 4 and 15 under 35 USC 102(b) as being anticipated by Lichtenhan et al (5,412,053 and 5,589,562) has been withdrawn. Lichtenhan et al fails to teach polymers of instantly defined formula I wherein at least one of the substituents R1 to R17 includes at least one carbon-carbon triple bond or is a monovalent group capable of becoming a hydrocarbon through Diels-Alder reactions followed by an elimination reaction.

***Election/Restrictions***

3. Claims 1-2, 4 and 13-15 are allowable. Claims 5-8 and 11-12, previously withdrawn from consideration as a result of a restriction requirement, requires all the limitations of an allowable claim. Pursuant to the procedures set forth in MPEP § 821.04(a), the restriction requirement between inventions I-III, as set forth in the Office action mailed on March 21, 2006, is hereby withdrawn and claims 5-8 and 11-12 are hereby rejoined and fully examined for patentability under 37 CFR 1.104. In view of the withdrawal of the restriction requirement, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

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*Allowable Subject Matter*

4. Claims 1-2, 4-8, and 11-15 are allowed.

5. The following is an examiner's statement of reasons for allowance: The prior art, alone or in combination, fails to set forth an insulating-film forming material comprising a polymer (A) that have as repeat units a structure defined by formula (I) comprising formulas (Ia) and (Ib) in instant claim 1, wherein at least one of the substituents R1 to R17 includes at least one carbon-carbon triple bond or is a monovalent group capable of becoming a hydrocarbon through Diels-Alder reactions followed by an elimination reaction.

The prior art, alone or in combination, fails to teach a porous insulating-film forming material comprising a polymer (A) that have as repeat units a structure defined by formula (I) comprising formulas (Ia) and (Ib) in instant claim 1, wherein at least one of the substituents R1 to R17 includes at least one carbon-carbon triple bond or is a monovalent group capable of becoming a hydrocarbon through Diels-Alder reactions followed by an elimination reaction and at least one of a compound (B-1) and particles (B-2) as defined by instant claim 5.

Additionally, the prior art, alone or in combination, fail to teach a porous insulating-film forming material comprising a polymer (A) that have as repeat units a structure defined by formula (I) comprising formulas (Ia) and (Ib) in instant claim 1, wherein at least one of the substituents R1 to R17 includes at least one carbon-carbon triple bond or is a monovalent group capable of becoming a hydrocarbon through Diels-Alder reactions followed by an elimination reaction.

The closest prior would be to Lichtenhan et al however Lichtenhan et al differs in that it fails to expressly teach and/or fairly suggest a polymer for an insulating film that having the formula (I) as a repeating unit, wherein at least one of the substituents R1 to R17 includes at least one carbon-carbon triple bond or is a monovalent group capable of becoming a hydrocarbon through Diels-Alder reactions followed by an elimination reaction. Thus, accordingly, the instantly claimed invention is distinguished over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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*Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Sanza L. McClendon  
Examiner  
Art Unit 1711  
4/27/07

SMC